# THE APPAREL INDUSTRY IN VIRGINIA
## An Analytical and Reflective View

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## INTRODUCTION

In our continuing series on Virginia's apparel and textile industries, we review the role and importance of the apparel industry in Virginia's economy. This article also examines the industry's historical employment trends and the effects of increased globalization and new technology.

Virginia's apparel industry has been a significant component of the statewide economy. In the numerous towns and communities throughout the Commonwealth, local economies are dependent upon the apparel industry.

## DESCRIPTION OF THE APPAREL INDUSTRY

The apparel industry, also known as the cutting-up and needle trades, consists of firms that produce clothing and fabricate products by cutting and joining purchased textile fabrics and other related materials. The three basic types of apparel firms are manufacturers, jobbers, and contractors. Manufacturers perform the entire range of production. Jobbers design their own garments, buy necessary raw materials, arrange for the manufacture of clothing from their materials, and sell the finished apparel. Contractors manufacture apparel from materials owned by others.

Virginia's apparel employment is concentrated in the men's and boys' furnishings, work clothing, and allied garments sector. The firms in this sector (SIC 232) are involved in the manufacture of men's and boys' clothing except suits, coats, and overcoats. Employment in this sector was 5,873 in the third quarter of 1998, accounting for 37 percent of apparel employment.

Women's, misses', and juniors' outerwear (SIC 233) was the second largest sector, employing 3,719, or almost 24 percent of apparel employment. The third largest sector was miscellaneous fabricated textile products (SIC 239); employment in this sector was 3,013 in the third quarter of 1998 and represented about 19 percent of apparel employment.

The U.S. apparel industry is extremely competitive and highly fragmented. Apparel production is labor intensive and barriers to entry are low—sewing machines are inexpensive and do not require much education or training to operate. The apparel industry is also among the most globalized production sectors as a result of transportation and communication advances and changes in trade policies.

The apparel industry is nomadic and seeks inexpensive labor. Nearly a century ago, apparel production moved to the lower-wage U.S. from costly Europe. Apparel production migrated from the higher-wage Northeast to the lower-wage South. In the past 30 years, the same shift to lower-wage countries led the industry into Asia and, most recently, to Latin America and the Caribbean.[1]

## IMPORTANCE OF THE APPAREL INDUSTRY

Like the textile industry, which was the subject of the second article in this series, the apparel industry has also played a critical role in laying the foundation of Virginia's economy in this the last century of this millennium. In many towns of various sizes in Virginia, apparel plants employ a large percentage of the workforce and have done so since the early part of the century.

The apparel industry has seen its prominence as an employer of Virginia's workforce wax and wane over the past 50 years. Unlike the textile industry, which was Virginia's largest manufacturing employer in 31 of the 38 years between 1949 and 1987, the apparel industry with an employment level of 14,800 in 1949 was Virginia's fifth largest manufacturer and by 1998 held a similar rank among the manufacturing industries. However, during the 1950s and 1960s, apparel employment grew dramatically by 26,000 to 40,500 in 1973, ranking it second only to the textile industry in employment. After this peak employment level, the industry declined slowly over the following two decades with gains in some years. After 1992, employment declined more sharply to its current level of 15,900. (See Figure 1.)

Virginia's ratio of apparel employment to total manufacturing employment of 3.9 percent is similar to the national ratio of 4.1 percent. The state's ratio was 6.7 percent in 1949 and had peaked at 10.6 percent in 1971. Of the states that have apparel employment in their industry mix, Virginia is 15th in apparel employment.[2] Of those states, Virginia's ratio of apparel employment to manufacturing employment ranks 14th.

From 1949 to 1987, Virginia enjoyed an increasing share of national apparel employment. At 1.3 percent in 1949, the portion grew steadily until peaking at 2.9 percent in 1971. This share was also attained in 1972 and 1974. Throughout the 1970s Virginia's share of national apparel employment averaged approximately 2.8 percent. The 1980s saw a very slight decrease in the national share over the decade. However, by 1993 the decline began to accelerate and by the end of 1998 was 2.1 percent. (See Figure 2.)

Several parallels exist between the textile and apparel industries. For example, both industries have exhibited similar employment trends since 1949. Also, both industries experienced a steadily declining difference between wages and total manufacturing wages. In

1950 the average apparel wage was 18.6 percent lower than the average total manufacturing wage, and by 1998 the disparity had increased to 40.4 percent.

The 1998 hourly wage in the apparel industry was $7.69; the weekly wages were $292.22. The average hourly wage for total manufacturing was $12.91, with weekly wages at $544.80. Average hourly wages paid to apparel workers has been the lowest of all manufacturing wages throughout the past 50 years.

The predominant occupation within the industry is the sewing machine operator; women hold the vast majority of these positions. Our data concerning gender goes back to 1984 and reveals that on average 88 percent of apparel workers are female.

## LOCATION OF APPAREL MANUFACTURING[3]

Apparel manufacturing occurs in 90 of Virginia's 135 cities and counties. However, apparel manufacturing employment is primarily concentrated in South-central and Southwest Virginia, adjacent to the North Carolina border; the upper Shenandoah Valley; and Richmond city. (See Map.) The apparel industry is highly fragmented; there are approximately 232 apparel firms in Virginia with a total of 265 locations. Wrangler and Pluma are the largest two firms, each employing over 1,000 workers, and have several plants in Virginia. Apparel firms with roughly 500 employees or more include: Cross Creek Apparel, Tultex Corporation, Christianburg Garment Company, Health Tex, Halmode Apparel, Buster Brown Apparel, and Maid Bess Corporation.

Page and Henry counties are the two top counties in apparel employment, comprising 7.9 and 6.5 percent of the state's total, respectively. In Page County, all apparel employment in is men's and boys' separate trousers and slacks. Apparel employment in Henry County is split almost evenly between the men's and boys' furnishings, work clothing, and allied garments sector and miscellaneous fabricated textile products.

Russell, Smyth, and Carroll counties and Richmond, Roanoke, Salem, and Danville cities have apparel employment in the 500-999 range. (See Map.) These seven areas combined with Page and Henry counties account for over 44 percent of the state's apparel employment.

Apparel employment in Russell County is concentrated in women's, misses', and juniors' outerwear and in women's, misses', children's, and infants' undergarments. In Smyth County, men's and boys' furnishings, work clothing, and allied garments along with girls', children's, and infants' outerwear are the dominant sectors. All apparel employment in Carroll County is centered in the men's and boys' furnishings, work clothing, and allied garments sector. In Richmond, apparel employment is primarily concentrated in hats, caps, and millinery and in miscellaneous fabricated textile products. The majority of Roanoke's apparel employment is in the women's, misses', and juniors' outerwear sector. In Salem, women's, misses', and juniors' outerwear is the primary apparel sector. Nearly all of the apparel employment in Danville is in the girls', children's, and infants' outerwear sector.

## HISTORICAL EMPLOYMENT TRENDS

From 14,800 employees in 1949 to 40,500 in 1973, Virginia's employment in the apparel industry grew by a staggering 174 percent. However, employment has fallen by 61 percent since the peak in 1973. As in the textile industry, this trend of a sharp employment gain and decline is telltale of the apparel industry in Virginia, and for that matter, the national industry. Employment grew steadily from 1949 through 1973 with little variation in between the years, averaging 4.1 percent growth each year. After 1973 the energy crisis along with the ever-increasing domestic consumption of imports seems to have had a profound effect on the industry, cutting some 5,700 employees between 1973 and 1975. After this harsh 14 percent decline, the apparel workforce rebounded somewhat to 37,300 in 1976. Yet, by the following year, a downward trend set in that has held fairly constant at a rate of 3.7 percent per year.

After its peak in 1973, no other Virginia industry has lost a larger portion of employment. Like the textile industry, the apparel industry has consistently placed a larger burden on local economies due to the clustering of firms and its transitory nature.

While Virginia's apparel industry employment trended up prior to its peak in 1973, national apparel employment had been somewhat constant since 1949. Since 1973, apparel employment in both Virginia and the nation has trended down; however, the rate of decline for Virginia was greater than that of the nation. Over the 1949 to 1998 period, U.S. apparel employment declined 34 percent, with a large portion of this negative change occurring after 1990. Virginia's apparel employment, however, increased 7 percent over the 1949 to1998 period. Both U.S. and Virginia apparel employment trended down sharply after 1992. (See Figure 3.)

## TRADE

Increased globalization and technological advances are primary reasons for apparel employment losses. The technological, social, and political changes that have taken place in the past fifty years have opened new markets and allowed for the exchange of ideas. Countries that once closed their borders to the outside world have loosened or, in some cases, eradicated impeding obstacles to commerce.  New technologies that have advanced communications and transportation have facilitated the ease in which countries can trade.  And most importantly and fundamentally, world population has grown over the past fifty years, increasing the demand for goods, such as apparels, and supplying a large labor source for emerging countries.  Increased globalization along with associated rising imports have affected employment in the apparel industry.

By the end of 1998, the U.S. worldwide apparel trade deficit was $42.2 billion, $5 billion more than in 1997. The Asian and Caribbean countries along with China, Hong Kong, and Mexico, are among the top exporters of apparel goods to the U.S.  In 1998, U.S. negative trade balances (billions of dollars) in apparels existed with Asia, -$6.2; China, -$5.9; Caribbean, -$4.6; Hong Kong, -$4.4; and Mexico, -$4.2.

Growth in apparel imports has continued despite the Multifiber Arrangement (MFA). Pressures from low-cost labor from developing countries overwhelmed the intentions of the MFA, which was developed in 1974 to provide protection for domestic apparel and textile plants. The expiration of the MFA on December 31, 1994, commenced a 10-year transition period in which quotas of the MFA will be eliminated and tariffs will be reduced.

The global trading environment is becoming even more open.  The North American Free Trade Agreement (NAFTA), which was implemented in 1994 between the U.S., Mexico, and Canada, has been responsible for job loss, as many companies have moved operations to Mexico in order to capitalize on the lower cost of labor.  Conversely, jobs have been saved nationwide and in Virginia by increased exports of apparel goods to Canada.  In fact, exports to Canada of apparel goods produced in Virginia have increased 102 percent since 1993.

Many workers in the apparel industry have been impacted by imports of apparel goods and production shifts to Canada or Mexico. Data collected by the Virginia Employment Commission (VEC) for the period 1990-1999 reveals that imports and production shifts contributed importantly to the layoff of over 17,000 employees.

Interestingly, despite the current exodus of apparel plants from Virginia, apparel exports increased by an astonishing 98.8 percent from 1993 to 1997. In 1993, Virginia had exported $67.7 million in apparel goods worldwide; by the end of 1997, exports were valued at $134.6 million. Over this period, the apparel industry was ranked seventh in percentage change in exports. In 1997 the apparel industry was Virginia's eighteenth largest exporter. As U.S. firms become more proficient in selling their products to other countries and have more established distribution networks in those markets, strong export growth will continue.[4]

## PRODUCTIVITY

Productivity growth in the apparel industry also contributed to apparel job losses though, most likely, to a lesser extent than apparel imports. Compared to the textile industry, technological changes were less sweeping and more incremental. The smaller size of apparel firms and the difficulty in automating the apparel production process due to the soft and varied nature of fabrics, the complexity of the assembly process, and modifications required by rapidly changing fashions have resulted in smaller productivity gains in apparel.[5] Automation in apparel has occurred through the intelligent application of computers in designing, spreading, cutting, and pressing. Changes in the production process have also resulted in productivity gains.

As illustrated in Figure 4, U.S. apparel production initially trended up, but then has been relatively flat the last twenty years. Both the U.S. and Virginia apparel employment have been trending downward since their peaks in 1973. Productivity in the apparel industry, as captured by the multifactor productivity index for apparel, has increased steadily since 1949, reaching its peak in 1987. (See Figure 5.) Multifactor productivity shows the relationship of output to a combination of inputs used in the production of that output, such as labor, capital, and intermediate purchases. During the 1949-96 time period, apparel productivity increased at an average annual rate of 0.6 percent, which was below productivity growth in textiles (2.2 percent) and manufacturing (1.2 percent).

The apparel portion of Virginia Gross State Product (VAGSP) increased by 22 percent from 1977 to 1996, even though employment had declined. In 1977, apparel's value-added output was $343 million; in 1996, value-added output had increased to $419 million. Value-added output peaked in 1991 at $584 million; it is not clear if the effects of NAFTA can be seen after 1993 due to the post-NAFTA decline in progress. During 1993-1996, however, apparel's output declined by 17 percent and its percentage share of VAGSP declined from .3 percent to .2 percent. Moreover, the apparel share of manufacturing and non-durable manufacturing value-added output fell from 1.9 percent to 1.4 percent and 3.2 percent to 2.3 percent, respectively.

## SUMMARY

Virginia's long-established but declining apparel industry will continue to face fierce competition from expansion of free trade. As long as developing countries can supply less expensive labor, firms in Virginia and the U.S. will continue to reduce the number of domestic apparel workers. Although employment may stabilize in those firms that produce higher quality clothing items or provide retailers with just-in-time deliveries. The application of laborsaving and timesaving technologies may help apparel manufacturers to compete and maintain their market share. However, unless the market share is expanded, these productivity-enhancing technologies will have a negative impact on workers, as fewer will be needed to produce the same amount of goods.

Virginia's experienced apparel workforce along with the transportation infrastructure will continue to be positive factors in retaining and expanding specialized sectors within the apparel industry.

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1. Kim Clark, "The Fallout from Freer Trade, Apparel Makers Move South," *Fortune*, November 24, 1997, p. 62.

2. Apparel employment (000s) in the fifteen states is: California, 153.9; New York, 83.8; Texas, 52.0; North Carolina, 46.7; Pennsylvania, 38.5; Alabama, 34.8; Tennessee, 33.3; Georgia, 32.0; New Jersey, 24.1; Kentucky, 23.3; South Carolina, 23.0; Florida, 22.9; Mississippi, 21.0; Michigan, 18.6; and Virginia, 15.9.

3. Based on 2nd quarter 1998 ES-202.

4. "Apparel and Fabricated Textile Products," *U.S. Industry and Trade Outlook 1998*, p. 33-7.

5. Mark Mittelhauser, "Employment Trends in Textiles and Apparel, 1973-2005," *Monthly Labor Review*, August 1997, p. 27.